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FEE TRANSMITTAL for FY 2004

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☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 340.00

Complete if Known

Application Number 09/474,138
 Filing Date December 29, 1999
 First Named Inventor Erik L. SMITH
 Examiner Name Q. NGUYEN
 Art Unit 2642
 Attorney Docket No. 12177/42201

METHOD OF PAYMENT (check all that apply)

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims -20 ** = X =
 Independent Claims -3 ** = X =
 Multiple Dependent X = 0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	340.00
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 340.00)

SUBMITTED BY

Complete (if applicable)

Name (Print/Type) WILLIAM E. CURRY Registration No. (Attorney/Agent) 43,572 Telephone (202) 220-4323
 Signature *William E. Curry* Date OCTOBER 4, 2004

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



APPLICANT : Erik L. SMITH
SERIAL NO. : 09/474,138
FILED : December 29, 1999
FOR : SYSTEM AND METHOD FOR INTEGRATING CALL
DELIVERY FOR FIXED-SITE AND MOBILITY
SERVICES
ART UNIT : 2642
EXAMINER : Quynh H. NGUYEN

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

SIR:

This is a brief in support of an appeal filed in the above-identified application.

I. Real Party in Interest

The real party in interest in AT&T Wireless Services, Inc. a corporation of Redmond, Washington, USA.

II. Related Appeals and Interferences

There are no other appeals or interferences known to Appellant, Appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this Appeal.

10/05/2004 SDENBOB1 00000012 110600 09474138

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III. Status of Claims

The application as filed included claims 1-22. Claims 8, 15, 19, 21 and 22 were canceled, and claims 23-32 were added in an amendment filed March 27, 2003. Claims 24 and 29 were canceled in an amendment filed August 28, 2003. Claims 3-12, 16, 17 and 20 were canceled in an amendment filed February 20, 2004. Accordingly, claims 1, 2, 13, 14, 18, 23, 25-28 and 30-32 are pending in the application and are herein on appeal.

IV. Status of Amendments

No amendments were filed subsequent to final rejection.

V. Summary of the Invention

(Cites are to the specification and figures.) Embodiments of the present invention relate to a method for providing call forwarding between a fixed-site telecommunications device, such as a subscriber's residential telephone, and a mobility device, such as the subscriber's mobile telephone. (Page 2, lines 20-24.) According to embodiments of the invention, an incoming call may be received at one of a number corresponding to a fixed-site device or a number corresponding to a mobility device belonging a subscriber. (Page 2, lines 3-4; page 3, lines 7-8.) A call to the number corresponding to the fixed-site device may be received via a switch of the Public Switched Telephone Network (PSTN) that communicates with a Mobile Service Center (MSC) coupled to a mobility network. (FIG. 1, showing fixed-site device 101, switch 102, MSC 104, mobility network 107; page 6, lines 19-25). A call to the mobility device may received via the MSC (FIG. 2, showing mobility device 105, MSC 104; page 6, line 30-31.) The MSC may be coupled to a Home Location Register (HLR) that has a database including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for

either the fixed-site device or the mobility device. (FIG. 2, showing HLR database 106; page 6, lines 14-18).

Further, according to embodiments of the present invention, it may be determined that busy/no answer condition exists for the device corresponding to the number at which the incoming call is received. (Page 2, lines 24-25; page 3, lines 11-13.) If a busy/no answer condition is detected, the call forward settings of the HLR may be consulted. Based on the call forward settings, one of routing the incoming call to the fixed-site device, the mobility device, or voice mail may be performed. (Page 2, lines 28-29; page 3, lines 5-6, 13-14).

Embodiments of the present invention further relate to a method for updating a call forward setting via the Internet. The method may include receiving a request to update the call forward setting from a subscriber, the request being generated using a browser-capable subscriber device connectable to the Internet. (FIG. 12; page 11, lines 11-14.) According to the method, the request may be processed to update the call forward setting in an HLR. (FIG. 12, lines 11-23).

Further, it may be determined that the update request requires updating call forwarding information on a switch of the PSTN. The call formation information may accordingly be updated on the switch and result returned tot the subscriber. (FIG. 12; page 11-23). The subscriber device may be, for example, a personal computer or a mobile telephone. (FIG. 12; page 11, line 13; page 12, line 3.)

VI. Issues

A. Has the Examiner established that claims 1, 13 and 18 are unpatentable under 35 USC section 103(a) over Hartmaier et al. (U.S. Patent No. 5,978,672)?

B. Has the Examiner established that claims 2 and 14 are unpatentable under 35 USC section 103(a) over Hartmaier et al. (U.S. Patent No. 6,301,474) in view of Harlow et al. (U.S. Patent No. 5,206,901)?

C. Has the Examiner established that claims 23, 25-28 and 30-32 are unpatentable over Creamer et al. (U.S. Patent No. 6,028,917) in view of Hartmaier et al. (U.S. Patent No. 6,301,474)?

VII. Grouping of Claims

A. For the grounds of rejection giving rise to issue (A), the claims stand or fall together.

B. For the grounds of rejection giving rise to issue (B), the claims stand or fall together.

C. For the grounds of rejection giving rise to issue (C), claims 23, 26 and 27 stand or fall together. Claims 25, 28 and 30-32 stand or fall separately.

VIII. Arguments

A. With respect to issue (A) identified above, claims 1, 13 and 18 are patentable over Hartmaier et al. (U.S. Patent No. 5,978,672).

In the final Office Action mailed May 7, 2004 (hereafter, "Office Action"), claims 1, 13 and 18 of the present application were rejected under 35 USC 103(a) as being unpatentable over Hartmaier et al. (U.S. Patent No. 5,978,672) (hereafter, "Hartmaier '672").

Each of independent claims 1, 13 and 18 relates to receiving an incoming call at one of a number corresponding to a fixed-site device or a number corresponding to a mobility device belonging to the subscriber, wherein a call to

the number corresponding to the fixed-site device is received via a switch of the Public Switched Telephone Network that communicates with a Mobile Service Center (MSC) coupled to a mobility network. A call to the number corresponding to the mobility device is received via the MSC, the MSC being further coupled to a Home Location Register (HLR) having a database including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for either the fixed-site device or the mobility device.

Claims 1, 13, and 18 further relate to determining that a busy/no answer condition exists for the device corresponding to the number at which the incoming call is received, consulting the call forward settings of the HLR, and based on the call forward settings, performing one of routing the incoming call to the fixed-site device, to the mobility device, or to voice mail.

To establish a *prima facie* case of obviousness under § 103, all claim limitations of a claimed invention must be taught or suggested by the prior art. See MPEP, § 2143.03 and *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In view of the foregoing authority, Hartmaier '672 does not support the asserted rejection of claims 1, 13 and 18 for at least the reason that Hartmaier '672 fails to teach or suggest "the MSC being further coupled to a Home Location Register (HLR) having a database including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for either the fixed-site device or the mobility device" and "consulting the call forward settings of the HLR" as recited in claims 1, 13 and 18.

The latter is acknowledged by the Examiner (Office Action, numbered paragraph 2, lines 20-21). However, the Examiner contends that "it would have been obvious that the SCP 102 [of Hartmaier '672] manages applications such as the HRL having a database that stores user profiles, and the call to a wire line through PSTN 104 also sharing the common database" (Office Action, numbered paragraph 2, lines 24-26).

Contrary to the Examiner's assertion, the claimed features of "the MSC being further coupled to a Home Location Register (HLR) having a database

including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for either the fixed-site device or the mobility device" and "consulting the call forward settings of the HLR" are anything but obvious in view of Hartmaier '672. Instead, Hartmaier '672 actually teaches away from the claimed arrangement. Hartmaier '672 describes an arrangement for causing a private network to logically appear to a cellular network or "AIN" (Advanced Intelligent Network) wireline network as an extension of the cellular or AIN network. (col. 9, lines 7-11). To this end, an "SP processor" (where "SP" stands for "sub-SCP") is arranged between the private network and another network to translate messages between the networks. Hartmaier '672's arrangement may be configured as shown FIG. 2. FIG. 2 shows an SP processor 211 that executes software to provide an interface between a LAN 207 and an SCP (Service Control Point) 202 of a cellular network. See also, e.g., the paragraph bridging columns 10 and 11 of Hartmaier '672.

However, as acknowledged by the Examiner, Hartmaier '672 is completely silent as to consulting call forward settings of an HLR. Instead, Hartmaier '672 only describes call routing in connection with the SP element and a private PBX. Column 15, lines 11-15 of Hartmaier '672 are noted in this connection: "A number of applications can be resident on the private network that can benefit from the SP interconnection to the cellular network. One such application is that of a PBX. The functioning of the PBX application, connected via the SP to the cellular network is further described as a preferred embodiment of the subject invention." Hartmaier '672 goes on to tie the "PBX application" with "call treatment." See Hartmaier '672 at column 15, lines 26-28: "PBX users will have a number of configurable options that can customize the call treatment to suit the particular requirements." Thus, Hartmaier '672 actually teaches away from the claimed invention, by suggesting that "call treatment" is performed by configuring a PBX instead of by consulting call forward settings of an HLR.

It is further observed that "[i]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular

problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). In view of the foregoing authority, the application of Hartmaier '672 to reject the present claims is inapposite. As discussed above, Hartmaier '672 relates to causing a private network to logically appear to a cellular network or AIN wireline network as an extension of the cellular or AIN network, using an SP processor to translate messages between the private network and the cellular or AIN network. The present invention, by contrast, relates to delivering call forwarding services between a fixed-site telecommunications device, such as a subscriber's residential telephone, and a mobility device, such as the subscriber's mobile telephone.

Finally, it is noted that courts have held that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious ... [The Federal Circuit] has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992). Here, in view of the inappositeness of the Hartmaier '672 reference and of the fact that it actually teaches away from the claimed invention as discussed above, it is clear the Examiner has engaged in impermissible hindsight reconstruction to meet the claim recitations.

In light of the above, the Applicant respectfully submits that the asserted rejections under issue (A) as set forth above are unsustainable, and respectfully requests reversal of the Examiner's action with respect to issue (A).

B. With respect to issue (B) identified above, claims 2 and 14 are patentable over Hartmaier et al. (U.S. Patent No. 6,301,474) and Harlow et al. (U.S. Patent No. 5,206,901).

In the Office Action, claims 2 and 14 were rejected under 35 USC 103(a) as being unpatentable over Hartmaier et al. (U.S. Patent No. 6,301,474) (hereafter, "Hartmaier '474") in view of Harlow et al. (U.S. Patent No. 5,206,901). Claims 2 and 14 depend on claims 1 and 13 respectively, and therefore include the recitations thereof. Hartmaier '474 is a continuation-in-part of Hartmaier '672, but does not remedy deficiencies in Hartmaier '672 with respect to claims 1 and 13. For example, Hartmaier '672 is similarly silent as to "the MSC being further coupled to a Home Location Register (HLR) having a database including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for either the fixed-site device or the mobility device" and "consulting the call forward settings of the HLR" as recited in claims 1 and 13. Harlow et al. is also completely silent as to the latter recitations. Accordingly, claims 2 and 14 are allowable over Hartmaier '474 and Harlow et al. for at least the reasons discussed in connection with claims 1 and 13.

In light of the above, the Applicant respectfully submits that the asserted rejections under issue (B) as set forth above are unsustainable, and respectfully requests reversal of the Examiner's action with respect to issue (B).

C. With respect to issue (C) identified above, claims 23, 25-28 and 30-32 are patentable over Creamer et al. (U.S. Patent No. 6,028,917) and Hartmaier '474.

In the Office Action, claims 23, 25-28 and 30-32 were rejected under 35 USC 103(a) as being unpatentable over Creamer et al. (U.S. Patent 6,028,917) (hereafter, "Creamer") in view of Hartmaier '474.

Independent claims 23 and 28 relate to updating a call forward setting via the Internet, by operations including receiving a request to update the call forward setting from a subscriber, where the request is generated using a

browser-capable subscriber device connectable to the Internet. The request may be processed to update the call forward setting according to the request by updating a corresponding subscriber profile in a HLR. Claims 25 and 30, dependent on claims 23 and 28, respectively, recite determining that the update request requires updating call forwarding information on a switch of the PSTN, and updating the call forwarding information on the switch,

Like independent claims 23 and 28, independent system claim 31 includes recitations directed to updating a subscriber profile in a HLR using a browser-capable subscriber device. Claim 32, dependent on claim 31, further requires a switch interface device coupled to the HLR, and a switch coupled to the interface device, the switch being adapted to receive commands from the interface device for updating call forwarding information responsive to an update call forwarding request corresponding to the subscriber request received by the interface device from the HLR.

Accordingly, Creamer cannot support the asserted rejection for at least the reason that Creamer does not teach or suggest using a browser-capable device to update a call forward setting in an HLR, as required by each of independent claims 23, 28 and 31. Instead, Creamer relates to a fundamentally different arrangement. Creamer relates to extending PSTN services to equipment linked to network external to the PSTN, such as computers linked to the Internet. See Creamer, col. 8, lines 28-32. Accordingly, Creamer describes a link between a PSTN and an external network via a VP (voice peripheral) processor. See Creamer, FIG. 3 and col. 8, lines 46-67 and col. 9, lines 1-2.

In Creamer, a piece of equipment connected to the external network can receive PSTN-type services through the VP processor. For example, a personal computer connected to the Internet could receive an "extended call waiting service." The extended call waiting service could include such things as a visible or audible indication of an incoming call at a subscriber's computer. See Creamer, col. 4, lines 63-67 to col. 5, lines 1-24.

In view of the foregoing, an interpretation of Creamer consistent with the Examiner's requires, at a minimum, reversing a directionality of operations as

they are actually described in Creamer. In Creamer as actually set forth, a computer connected to the Internet receives PSTN services; i.e., the flow of operations is from a PSTN toward an Internet computer. In the present invention as claimed in claims 23, 28 and 31, things are the other way around. That is, a web browser is used to change information in an HLR or a PSTN switch; thus, an IP network acts on a mobility or PSTN network.

The Examiner cites Creamer at column 2, lines 46-64 and column 4, lines 54-63 in support of the asserted rejection. However, column 2, lines 46-64 of Creamer discloses only the general information that service delivery parameters of a PSTN can be changed by a user. Nothing is disclosed about how such parameters are to be changed. Column 4, lines 54-63 only disclose the VP processor interface for providing the extended PSTN services to an external network.

The Examiner acknowledges that Creamer does not teach a subscriber profile in an HLR as recited in independent claims 23, 28 and 31, and cites Hartmaier '474 as meeting this recitation. More specifically, the Examiner contends that "[i]t would have been obvious to one of ordinary skill at the time the invention was made to incorporate the feature of updating the subscriber profile in a HLR, as taught by Hartmaier, in Creamer's system in order to allow updating the call forward setting from a subscriber in both wire line and wireless networks environments" (Office Action, numbered paragraph 4, lines 13-16).

It is noted that the CAFC has held that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 972 F.2d 1260, 1266 (Fed. Cir. 1992). Here, nothing in Creamer suggests the modification proposed by the Examiner to include an HLR as recited in independent claims 23, 28 and 31. An HLR is an element of a mobile network. Creamer, by contrast, relates only to PSTN services and is not at all concerned with mobile networks.

Further, with regard to combining prior art teachings to contend that the combination renders a claimed invention obvious, the CAFC has held that

“[t]here must be some reason, suggestion or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge cannot come from the applicant’s invention itself.” In re Oetiker, 977 F.2d 1443, 1447, 24 USPQ2d 1443, 1446 (Fed. Cir. 1991). Here, the Examiner attempts to meet the limitations of claims 23, 28 and 31-32 by the combination of Creamer with Hartmaier '474. However, the effort is clearly strained. As noted, Creamer has nothing to do with mobility systems and thus one of ordinary skill in the art would not look to include elements of a mobility system absent the Applicant’s own disclosure. However, this is a source that is off-limits for purposes of applying an obviousness rejection, as held in In re Oetiker. Accordingly, resorting to Hartmaier '474 to provide the HLR absent from Creamer runs afoul of settled authority.

More importantly, even the combination of Creamer with Hartmaier '474 cannot yield the claimed invention. As demonstrated earlier, Creamer’s arrangement does not “allow updating the call forward setting,” contrary to the Examiner’s allegation. Again, Creamer relates to extending PSTN services such as a call waiting indication to a computer connected to the Internet, and not to using a browser-capable device to update call forward settings of an HLR. Moreover, Hartmaier '474 cannot remedy the shortfall in Creamer. Hartmaier is completely silent as to using a browser-capable device to update call forward settings of an HLR.

In view of the above, independent claims 23, 28 and 31 are allowable over Creamer and Hartmaier '474. Further, each of dependent claims 25-27, 30 and 32 includes the recitations of one of independent claims 23, 28 and 31. Therefore, each of dependent claims 25-27, 30 and 32 is likewise allowable over Creamer and Hartmaier '474 for at least the reasons set forth in connection with independent claims 23, 28 and 31.

Claims 25, 29, 30 and 32 are each separately patentable

Moreover, each of dependent claims 25, 30 and 32 is separately patentable over the art of record. Nothing in Creamer or Hartmaier '474 even

remotely suggests the further limitations of determining that an update request to an HLR requires updating call forwarding information on a switch of the PSTN, and updating the call forward information on the switch, as required by claims 25 and 30. Nor do Creamer et al. or Hartmaier '474 even remotely suggest the analogous recitations in claim 32 of a switch interface device coupled to the HLR, and a switch coupled to the interface device, the switch being adapted to receive commands from the interface device for updating call forwarding information responsive to an update call forwarding request corresponding to the subscriber request received by the interface device from the HLR.

In view of the foregoing, the Applicant respectfully submits that the asserted rejection under issue (C) as set forth above is unsustainable, and respectfully requests reversal of the Examiner's action with respect to issue (C).

Conclusion

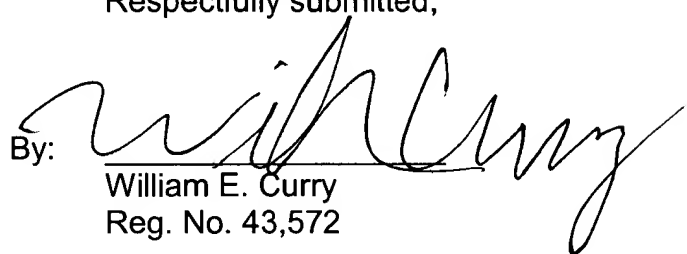
In view of the above, it is abundantly clear that the Examiner erred in finally rejecting claims 1, 2, 13, 14, 18, 23, 25-28 and 30-32 of the present application. It is therefore respectfully requested that the Board reverse the Examiner and allow claims 1, 2, 13, 14, 18, 23, 25-28 and 30-32.

The Examiner is invited to contact the undersigned at (202) 220-4323 to discuss any matter concerning this application. The Office is authorized to charge any fees related to this communication to Deposit Account No. 11-0600.

Respectfully submitted,

Dated: Oct. 4, 2004

By:


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APPENDIX

Claims on Appeal

1. A method for forwarding an incoming call addressed to one of a plurality of Directory Numbers belonging to a subscriber, including:

receiving an incoming call at one of a number corresponding to a fixed-site device or a number corresponding to a mobility device belonging to the subscriber, wherein a call to the number corresponding to the fixed-site device is received via a switch of the Public Switched Telephone Network that communicates with a Mobile Service Center (MSC) coupled to a mobility network, and a call to the number corresponding to the mobility device is received via the MSC, the MSC being further coupled to a Home Location Register (HLR) having a database including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for either the fixed-site device or the mobility device;

determining that a busy/no answer condition exists for the device corresponding to the number at which the incoming call is received;

consulting the call forward settings of the HLR; and

based on the call forward settings, performing one of routing the incoming call to the fixed-site device, to the mobility device, or to voice mail.

2. The method of claim 1, wherein the switch is a Class 5 Switch.

13. A medium storing instructions adapted to be executed by a processor to perform steps including:

receiving an incoming call directed to one of a number corresponding to a fixed-site device or a number corresponding to a mobility device belonging to the subscriber, wherein a call to the number corresponding to the fixed-site device is received via a switch of the Public Switched Telephone Network that communicates with a Mobile Service Center (MSC) coupled to a mobility network, and a call to the number corresponding to the mobility device is

received via the MSC, the MSC being further coupled to a Home Location Register (HLR) having a database including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for either the fixed-site device or the mobility device;

determining that a busy/no answer condition exists for the device corresponding to the number at which the incoming call is received;

consulting the call forwarding settings of the HLR; and

based on the call forwarding settings, performing one of routing the incoming call to the fixed-site device, to the mobility device, or to voice mail.

14. The medium of claim 13, wherein the switch is a Class 5 Switch.

18. An apparatus for forwarding an incoming call to one of a plurality of Directory Numbers belonging to a subscriber, including:

a processor;

a memory coupled to said processor, said memory storing instructions adapted to be executed by said processor to:

receive an incoming call at one of a number corresponding to a fixed-site device or a number corresponding to a mobility device belonging to the subscriber, wherein a call to the number corresponding to the fixed-site device is received via a switch of the Public Switched Telephone Network that communicates with a Mobile Service Center (MSC) coupled to a mobility network, and a call to the number corresponding to the mobility device is received via the MSC, the MSC being further coupled to a Home Location Register (HLR) having a database including a plurality of values for subscriber call forward settings to determine an action to be taken in the event of a busy/no answer condition for either the fixed-site device or the mobility device;

determine that a busy/no answer condition exists for the device corresponding to the number at which the incoming call is received;

consult the call forwarding settings of the HLR; and

based on the call forwarding settings, perform one of routing the incoming call to the fixed-site device, to the mobility device, or to voice mail.

23. A method for updating a call forward setting via the Internet, comprising:

receiving a request to update the call forward setting from a subscriber, the request being generated using a browser-capable subscriber device connectable to the Internet; and

processing the request to update the call forward setting according to the request by updating a corresponding subscriber profile in a Home Location Register (HLR).

25. The method of claim 23, wherein the processing further includes:

determining that the update request requires updating call forwarding information on a switch of the Public Switched Telephone Network;

updating the call forward information on the switch; and

returning a result to the subscriber.

26. The method of claim 23, wherein the subscriber device is a personal computer.

27. The method of claim 23, wherein the subscriber device is a mobile telephone.

28. A medium storing instructions adapted to be executed by a processor to perform steps including:

receiving a request to update a call forward setting from a subscriber, the request being generated using a browser-capable subscriber device connectable to the Internet; and

processing the request to update the call forward setting according to the request by updating a corresponding subscriber profile in a Home Location Register .

30. The medium of claim 28, wherein the processing further includes:
- determining that the update request requires updating call forwarding information on a switch of the Public Switched Telephone Network;
 - updating the call forward information on the switch; and
 - returning a result to the subscriber.
31. A system for updating a call forward setting via the Internet, comprising a Home Location Register (HLR) connectable to the Internet and configured to receive a request to update the call forward setting from a subscriber, the request being generated using a browser-capable subscriber device connectable to the Internet, and to process the request to update the call forward setting according to the request.
32. The system of claim 31, further comprising a switch interface device coupled to the HLR, and a switch coupled to the interface device, the switch being adapted to receive commands from the interface device for updating call forwarding information responsive to an update call forwarding request corresponding to the subscriber request received by the interface device from the HLR.